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| 10/627,469 | 07/25/2003 | Kenneth H. Bronstein | 200206518-1 | 3228 |

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| EXAMINER | |
|---|---|
| TRAN, NHAN T | |

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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

| Office Action Summary | Application No. | Applicant(s) | |
|---|---|---|---|
| | 10/627,469 | BRONSTEIN ET AL. | |
| | Examiner | Art Unit | |
| | Nhan T. Tran | 2622 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on 7/25/2003, 10/18/2004 & 3/12/2007.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) 1-40 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-40 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on 25 July 2003 is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

## DETAILED ACTION

### *Information Disclosure Statement*

1. The information disclosure statements (IDS) submitted on 7/25/2003, 10/18/2004 and 3/12/2007 are in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statements are being considered by the examiner.

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1, 3-5, 7-9, 11, 12, 14, 16-18, 20-24, 31-34, 36, 37, 39 & 40 are rejected under 35 U.S.C. 102(e) as being anticipated by Parulski et al. (US 6,629,104).

Regarding claim 1, Parulski discloses a method for associating metadata with captured images, comprising:

an image capture device (a digital camera 10; Fig. 2) receiving the metadata from an external source (i.e., a computer 60 or a removable memory card 30); capturing an image (by CCD image sensor 14) with the image capture device, and the image

capture device associating the captured image with the metadata, wherein the metadata is received prior to capturing the image (see col. 2, lines 55-58; col. 5, lines 20-41; col. 6, lines 30-40, wherein the metadata categorization software received and stored in the EPROM 28 of the digital camera 10 also includes predefined labels for the user to **select,** i.e., best photos, funny photos, etc., in addition to custom labels that are created by the users prior to capturing an image. Note the incorporated reference US 5,477,264 for predefined labels in the disclosure of Parulski).

Regarding claim 3, Parulski also discloses that the image capture device received the metadata at a public venue (network service provider 70; Fig. 2), and wherein the metadata is associated with the public venue (see col. 5, lines 47-55 and also note the analysis of claim 1).

Regarding claim 4, it is also seen in Parulski that the image capture device receives the metadata by way of a wireline connection (USB cable interface 26/30 shown in Fig. 2) and wherein the external source is a personal computer (computer 40) that accepts inputs from a user (using mouse, keyboard). See col. 4; line 66 – col. 5, line 4, wherein the USB cable is used to transfer data between the camera and computer as an alternative mode without using the memory card 30.

Regarding claim 5, Parulski further discloses the metadata includes a plurality of labels, and wherein the method additionally comprises a user of the image capture

device selecting which of the plurality of labels to associate with the image captured by the image capture device (see Figs. 3-7 and col. 7, line 45 – col. 8, line 67).

Regarding claim 7, as also disclosed by Parulski, the metadata include a graphics object (col. 8, lines 27-30).

Regarding claim 8, since the graphics object as metadata is captured by the image capture device via removable memory interface or USB interface as discussed in claims 4 & 7, the graphics object is an image previously captured by the image capture device.

Regarding claim 9, Parulski clearly discloses that the image captured by the image capture device is a photograph (a digital photograph; col. 3, lines 61-62).

Regarding claim 11, Parulski discloses an image capture device (a digital camera 10 shown in Fig. 2), comprising:

an interface (20/26) that receives a plurality of metadata labels from an external source (removable memory card 30 or computer 40) prior to the image capture device capturing an image; a memory (removable memory 30) that stores the image; and a processor (18) that assigns one or more of the plurality of metadata labels to the image under the control of a user of the image capture device (see Figs. 2-7; col. 2, lines 55-

58; col. 3, lines 60-62; col. 5, lines 20-41 and col. 8, lines 57-67. Please note that the analysis of claim 1 is also applied).

Regarding claim 12, it is clear in Parulski that the image capture device further comprises an optical subsystem (lens 12 shown in Fig. 2) that acquires a photographic image and stored the image in a memory (col. 3, lines 60 – col. 4, line 9).

Regarding claims 14 & 16, as shown in Figs. 3-7 and col. 8, lines 27-36, at least one of the plurality of metadata is a text label, a graphics object.

Regarding claim 17, Parulski further discloses the external source transmits the plurality of metadata labels, and wherein the plurality of metadata labels pertains to a public venue (network service provider 70 shown in Fig. 2) proximate with the image capture device (col. 5, lines 47-55).

Regarding claim 18, it is clearly seen in Parulski that the image capture device further comprises a selector (buttons 24) that enables a user to change the plurality of metadata labels to be associated with an image (col. 8, lines 34-36, 57-67).

Regarding claim 20, since each user using the digital camera 10 can select or create his/her own labels prior to capturing images as illustrated in steps 130, 140, Parulski's disclosure also *encompasses* that the interface receives at least one

metadata label and associates the at least one metadata label (i.e., People/Susan) with a first user of the image capture device, and associates at least one other metadata label (i.e., Subjects/Flowers) with a second user of the image capture device (Figs. 4-7).

Regarding claim 21, it is also seen in Parulski that the external source (i.e., a computer 40) is a second image capture device (note that the computer is a second image capture device because it can capture an image by reading image data from a memory card 30 at card reader 48 or USB interface 36; see Fig. 2).

Regarding claim 22, Parulski discloses that the processor (18) executes a conflict-resolution algorithm (Fig. 1) that assigns metadata labels to a captured image based on the definition of the metadata label (see col. 5, lines 20-41, wherein the flowchart shown in Fig. 1 represents a conflict-resolution algorithm executed by the processor 18 of the camera to assign metadata with different labels and sub-labels as shown in Fig. 4 to avoid conflict among the sub-labels in response to the user's input. It is importantly noted that the claim does not require that the processor automatically assigns the metadata labels to the captured image based on the definition of the metadata label. Thus, the claim limitations are board enough to read on the Parulski's disclosure above).

Regarding claim 23, Parulski discloses an image capture device (a digital camera 10 shown in Fig. 2), comprising:

means (interface 20/26) for receiving and storing a plurality of metadata labels from an external source (col. 5, lines 20-41 and note the analysis of claim 1);

means (18/20) for capturing a plurality of images in memory (col. 3, line 60 – col. 4, line 9);

means (18) for automatically associating at least some of the plurality of stored metadata labels with at least some of the plurality of images captured in memory (see step 210 in Fig. 1 and col. 8, lines 37-46, wherein the metadata labels selected/created beforehand are *automatically* associated with the captured images in step 210 by skipping steps 180-200).

Regarding claim 24, see the analyses of claims 5 & 18.

Regarding claim 30, see the analyses of claims 7 & 16.

Regarding claim 31, Parulski discloses means (communication interface 20/26) for loading a plurality of metadata labels into a second image capture device (see Fig. 2 and col. 5, lines 5-7, wherein a computer captures the images from the camera that includes associated metadata labels selected by the user as discussed above. Thus, the metadata labels are loaded into the computer by this communication).

Regarding claim 32, see the analyses of claims 22 & 31. Note Fig. 4 of Parulski that the conflict of metadata labels may occur in the labels (i.e., People). This conflict is

solved by assigning different sub-labels (i.e., Matthew, Susan, Susan's family, etc.) to distinguish labels from each other when the labels (i.e., People) in the camera are the same as the labels (i.e. People) in the computer.

Regarding claim 33, see the analyses of claims 11 & 23.

Regarding claim 34, see the analysis of claim 4.

Regarding claims 36 & 37, see the analyses of claims 17 & 18, respectively.

Regarding claim 39, Parulski further discloses that the associating step includes assigning metadata to the captured image by way of the captured image belonging to a collection (e.g., classifications, locations or subjects are selected by the user as a collection) and the metadata has been assigned to the collection (see Fig. 2 and col. 5, lines 20-41).

Regarding claim 40, see the analyses of claims 1 & 2.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 2, 10, 13, 27, 28 & 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Parulski et al. (US 6,629,104) in view of Aublant et al. (US 2004/0126038).

Regarding claim 27, Parulski is silent about that the means for receiving and storing a plurality of metadata labels includes a wireless interface, and wherein the external source is a public venue transmitter that conveys a wireless signal to the image capture device.

However, Aublant teaches a digital camera (100) that receives and stores metadata from a public venue transmitter (i.e., Smart Tag device 604 shown in Fig. 6A or GPS and other devices shown in Fig. 2) that conveys a wireless signal to the image capture device when the user is within predetermined wireless range or location (see Aublant, abstract and [0014]-[0015] and [0040]). Such implementation of wireless feature enhances mobility and convenience of the camera, i.e., when the camera is used to capture images at theme parks, museums, sport venues, etc., by transmitting metadata wirelessly to the camera to associate with the captured image without manual intervention as taught by Aublant in [0067] & [0014].

Therefore, it would have been obvious to one of ordinary skill in the art modify the image captured device in Parulski to include the teaching of Aublant for receiving and storing the metadata labels in the image capture device wirelessly from a public venue transmitter that conveys a wireless signal to the image capture device so as to

enhance mobility and convenience of the image capture device for use at various public places for automatically associating the metadata labels to the captured image.

Regarding claim 28, Parulski in view of Aublant as analyzed in claim 27 clearly teaches that the wireless signal conveys the plurality of metadata labels to the image capture device, and wherein the image capture device detects the wireless signal (when the image capture device is within a predetermined wireless range, i.e., Bluetooth, or a predetermined location) and associates at least some of the plurality of metadata labels with at least some of the plurality of images captured in memory upon the detection of the signal (see Aublant, [0014]-[0015]).

Regarding claims 2 & 35, see the analyses of claim 27.

Regarding claims 10 & 13, although Parulski does not explicitly disclose an audio system that acquires an audio image and writes the audio image to a memory, such lack of teaching is compensated by Aublant. As shown in Fig. 1A and [0036], the digital camera 100 is capable of capturing an audio image and recording it into a removable memory.

Therefore, it would have been obvious to one of ordinary skill in the art to combine the teachings of Parulski and Aublant to arrive at the Applicant's claimed invention for capturing and recording an audio image into the memory so that a better

reproduction of the image would be realized by playing the audio captured along with the image as user desires.

4. Claims 6, 15, 19, 29 & 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Parulski et al. (US 6,629,104) in view of Wong et al. (US 2004/0168118).

Regarding claim 19, Parulski does not disclose an audio sensor that recognizes a voice input as corresponding to a certain of the plurality of metadata labels.

Wong teaches an imaging device that includes a voice input (350 shown in Fig. 3) so as to allow the user to input voice annotations and/or voice commands as corresponding to a certain the plurality of metadata labels to captured images for annotating or organizing the images (see Wong, [0062]).

Therefore, it would have been obvious to one of ordinary skill in the art to modify the image capture device in Parulski to incorporate the teaching of Wong by including an audio sensor for recognizing a voice input as corresponding to a certain of the plurality of metadata labels so as allow the user to input voice annotations and/or voice commands to associate with capture images for user convenience in addition to text labels.

Regarding claim 38, see the analysis of claim 19, wherein voice commands are used to select the metadata (i.e., "Christmas") associated with the captured image.

Regarding claims 6, 15, 29, Parulski in view of Wong discussed in claim 19 clearly teaches that at least one of the plurality of metadata is an audio labels (voice annotations taught by Wong above).

5. Claims 25 & 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Parulski et al. (US 6,629,104) in view of Leiper (US 6,184,862).

Regarding claim 25, Parulski discloses the means for selecting at least some of the plurality of metadata labels being a button (24 shown in Fig. 2). Parulski does not explicitly teach that the means for selecting is a thumbwheel. However, it is well recognized by Leiper that a user interface for an electronic device for selecting images/items on a display device can be implemented by either a button, a thumbwheel or a touchpad (see Leiper, col. 5, lines 41-51).

Therefore, it would have been obvious to one of ordinary skill in the art to use a thumbwheel as an obvious variant over the button in Parulski in view of suggestion of Leiper so that the user would be able to quickly roll for selection of the metadata labels.

Regarding claim 26, Parulski discloses the means for selecting at least some of the plurality of metadata labels being a button (24 shown in Fig. 2). Parulski does not explicitly teach that the means for selecting is a touchpad. However, it is well recognized by Leiper that a user interface for an electronic device for selecting

images/items on a display device can be implemented by either a button, a thumbwheel or a touchpad (see Leiper, col. 5, lines 41-51).

Therefore, it would have been obvious to one of ordinary skill in the art to use a touchpad as an obvious variant over the button in Parulski in view of suggestion of Leiper so as to eliminate mechanical component(s) for reliability and compactness.

***Conclusion***

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nhan T. Tran whose telephone number is (571) 272-7371. The examiner can normally be reached on Monday - Friday, 8:00am - 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Ometz can be reached on (571) 272-7593. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

NHAN T. TRAN
Patent Examiner